In the Specification

Please amend the paragraph at page 3, line 26 through page 4, line 25 as follows:

The separating column according to the present invention has a channel for a fluid flow having molecules to be analyzed (analyte molecules). The channels may be implemented by structuring trenches in a semiconductor disk, such as a silicon disk, and covering the silicon disk with a second silicon disk or a glass disk, for example. The manufacturing of such a channel structure is described, for example, in DE 19726000. The channel has opposing curves having turning points at which the curve direction preferably changes alternately. In this way, the channel receives a meandering geometry. A turning point as defined in the present invention as a point at which the curved direction of the channel and therefore also the flow direction of the fluid stream flowing through the channel ~~changes~~ inflects to the ~~particular other direction~~ opposite curvature. That is, a turning point is to be understood in a mathematical way as an inflection point along the channel. A fluid stream as defined in the present invention is any gas or liquid stream. A curve as defined in the present invention is understood as any curved ~~region~~ portion of the channel having the same curve direction (curvature). That is, ~~Such~~ a curve is a portion of the channel that lies between two ~~directly~~ sequential turning points[[,]] which mark ~~a change to the particular other direction~~ opposite changes in curvature of the channel. In the separating column according to the present invention, the mean diameter of the channel is larger than the path which an analyte molecule covers through diffusion on its way between two sequential turning points that each mark an identical ~~direction~~ change in curvature. These sequential turning points that each mark an identical change in curvature are to be understood as turning points which are located at the beginning of ~~a curve having~~ sequential curves that each have the same curve direction (curvature).

Please amend the paragraph at page 4, line 27 through page 5, line 12 as follows:

There is an essentially laminar flow in a separating column channel. The present invention is now based on the surprising recognition that the "racetrack" effect described above may be avoided if the column geometry is designed so that an analyte molecule on the inside of the curve (the "inside track") is prevented from being able to reach the diametrically opposite side (the "outside track") of the separating column channel through diffusion on the way from one turning point to the next turning point having identical ~~direction~~ curvature change. For this purpose, in the separating column according to the present invention, the channel diameter and/or cross-section is made larger than the diffusion path which an analyte molecule must cover on the way between two sequential turning points that ~~mark the same direction change~~ each mark an identical change in curvature. In this way, the analyte molecules remain essentially on their track and do not change between "inside track" and "outside track" in a way which results in a strong defocusing of the analyte package.

Please amend the paragraph at page 5, line 23 through page 6, line 2 as follows:

In a preferred embodiment of the present invention, the mean diameter of the channel is at least one order of magnitude, i.e., ten times, larger than the path which an analyte molecule covers through diffusion on its way between two sequential turning points ~~having identical direction change~~ that each mark an identical change in curvature. Defocusing of the analyte package through the racetrack effect is thus largely avoided.

Please amend the paragraph at page 11, line 7 through page 13, line 8 as follows:

FIG. 2 shows a preferred embodiment of the present invention. The separating column 1 forms loops 13 (four here) having legs 22, 23 between the inlet 5 and outlet 6 of the separating column 1. The channel 2, which is structured in a silicon disk (a silicon wafer) with the aid of standard methods of microsystem technology, such as lithographic methods, has a meandering shape. This arises through

sequential curves 3, 4. The curves 3 have a curve direction which is opposite to that of the curves 4. If one assumes a flow direction of the fluid stream from the separating column inlet 5 to the separating column outlet 6, the curves 3 have a clockwise curvature in the top view, while the curves 4 display a counterclockwise curvature. Turning points 7, 7a and/or 8, 8a lie at points having a change of the curve direction. These turning points lie on an imaginary longitudinal axis 9 drawn through a leg 22, 23. The curves 3, 4 follow one another directly, without a linear section between them. Because the mean diameter of the channel 2 is larger than the path which an analyte molecule covers through diffusion on its way between two sequential turning points (7, 7a; 8, 8a) that each have an identical change in curvature, defocusing of the analyte package is largely avoided. The number of curves 3 preferably corresponds to the number of opposing curves 4, so that a compensation of the direction changes occurs. In the embodiment shown, the curves 3 lie directly one on top of another on an imaginary line 24 perpendicular to the longitudinal axis 9 in a top view. Correspondingly, the curves 4 also lie directly on top of one another. The legs 22, 23 running parallel to one another may thus be positioned close to one another. The legs 22 are connected to the particular neighboring legs 23 via linear channel sections 12, 19 and curves 10, 11. In contrast to the curves 3, 4, the curves 10, 11 do not describe a semicircle, but rather only a quarter circle, i.e., an angle of approximately 90.degree. The direction changes are also largely compensated for here. In addition, it is unimportant for the separation efficiency of the separating column 1 according to the present invention if individual curves 3, 4, 10, 11 toward the inlet 5 and/or outlet 6 of the separating column 1 do not experience a corresponding compensation. The linear sections 12, 19 are positioned at points at which a complete compensation of the direction changes has occurred, so that the effect described here for the column in FIG. 1 may not occur. After entering the column at the inlet 5, the fluid stream reaches the first turning point 7, which marks the beginning of the first curve 4. A counterclockwise direction changes occurs there. After passing through the curve 4, the fluid stream reaches the first turning point 8, which marks the beginning of the first curve 3, where a clockwise direction change occurs. The direction change caused by the first curve 4 is compensated for after passing through the first curve 3. After passing through the first curve 3, the fluid stream reaches the turning point 7a, at which a counterclockwise direction change also occurs. At the turning point 8a, a

clockwise correction change occurs again, etc. After passing through the leg 22 of the first loop 13, the fluid stream passes through a first linear section 12 and a first curve 10, passes through the leg 23 in a direction which is opposite to that through the leg 22, and enters the leg 22 of the second loop 13 via a first curve 11 and a first linear section 19. After passing through the second loop 13 and two further loops 13, the fluid stream exits out of the outlet 6 of the column and reaches either a downstream separating column 1 and/or a detector here.